U.S. Patent Application No. 10/541,205 Attorney Docket No. 10191/3871 RCE Response to Final Office Action of April 27, 2007

## **LISTING OF THE CLAIMS:**

Without prejudice, this listing of claims will replace all prior versions and listings of the claims in the present application:

## **LISTING OF CLAIMS:**

1-14. (Canceled).

15. (Currently Amended) A method for detecting knocking, in which a measuring signal of a knock sensor is evaluated during combustion in a cylinder of an internal combustion engine to determine whether or not the combustion is taking place with knocking, the method comprising:

subdividing the measuring signal into a plurality of time windows within a single combustion cycle;

examining each window to determine whether the combustion occurred with knocking, the examining including separately integrating a signal dependent upon the measuring signal in each of the plurality of time windows to produce a plurality of integrated signals associated with the single combustion cycle; and

comparing results of the <u>examining of the</u> plurality of windows to each other for a final assessment of whether the combustion occurred with knocking.

- 16. (Previously Presented) The method as recited in claim 15, wherein the combustion is assessed as occurring with knocking if a knocking combustion is detected in a majority of the plurality of windows.
- 17. (Previously Presented) The method as recited in claim 15, wherein the measuring signal is subdivided into at least three measuring windows, and the combustion is assessed as occurring with knocking if a knocking combustion is detected in at least two of the windows.
- 18. (Previously Presented) The method as recited in claim 15, wherein a length of the windows is predefined in a fixed manner.

U.S. Patent Application No. 10/541,205 Attorney Docket No. 10191/3871 RCE Response to Final Office Action of April 27, 2007

- 19. (Previously Presented) The method as recited in claim 15, wherein a length of the windows is changed as a function of a speed of the internal combustion engine.
- 20. (Previously Presented) The method as recited in claim 15, wherein the windows are defined as one of a time range or an angle range.
- 21. (Previously Presented) The method as recited in claim 15, wherein gaps are provided between the windows, and no examination of whether the combustion occurred with knocking takes place in the gaps.
- 22. (Currently Amended) A device for detecting knocking, in which a measuring signal of a knock sensor is evaluated during combustion in a cylinder of an internal combustion engine to determine whether or not the combustion is taking place with knocking, comprising:

an arrangement configured to subdivide the measuring signal into a plurality of time windows within a single combustion cycle;

an arrangement configured to examine each window to determine whether the combustion occurred with knocking, the examining including separately integrating a signal dependent upon the measuring signal in each of the plurality of time windows to produce a plurality of integrated signals associated with the single combustion cycle; and

a comparator to compare results of the <u>examining of the</u> plurality of windows to each other for a final assessment of whether the combustion occurred with knocking.

- 23. (Previously Presented) The device as recited in claim 22, wherein the combustion is assessed as occurring with knocking if a knocking combustion is detected in a majority of the plurality of windows.
- 24. (Previously Presented) The device as recited in claim 22, wherein the measuring signal is subdivided into at least three measuring windows, and the combustion is assessed as occurring with knocking if a knocking combustion is detected in at least two of the windows.
- 25. (Previously Presented) The device as recited in claim 22, wherein a length of the windows is predefined in a fixed manner.

U.S. Patent Application No. 10/541,205 Attorney Docket No. 10191/3871 RCE Response to Final Office Action of April 27, 2007

- 26. (Previously Presented) The device as recited in claim 22, wherein a length of the windows is changed as a function of a speed of the internal combustion engine.
- 27. (Previously Presented) The device as recited in claim 22, wherein the windows are defined as one of a time range or an angle range.
- 28. (Previously Presented) The device as recited in claim 22, wherein gaps are provided between the windows, and no examination of whether the combustion occurred with knocking takes place in the gaps.
- 29. (New) The method of claim 15, further comprising:

  producing the measuring signal of the knock sensor, wherein the knock sensor is a structure-borne sound sensor.
- 30. (New) The device of claim 22, further comprising:a structure-borne sound sensor for producing the measuring signal.
- 31. (New) The method of claim 15, wherein the measuring signal measured by the knock sensor is an acoustical signal.
- 32. (New) The device of claim 22, wherein the measuring signal measured by the knock sensor is an acoustical signal.